

## Double diaphragm pump with complete emptying

# tim<sup>®</sup> PRO



Lever up, the ball is lifted (non-return valve unlocked)







Technical drawing: All dimensions in mm

## PREMIUM double diaphragm pumps PTI-MEM5600V-VA-RE

Order no.	Туре	Media pipes	Material de- sign	ATEX
53503569	PTI-MEM5600V-VA-TF-TF-TF-FEP-PE1-iHZ-FL-RE	Rotates 180° Flange / thread 2"	VA	$\checkmark$

This pump is a further development of the original tim®PRO series, which has been highly regarded for many years in the paint supply sector and the printing machine industry for its process reliability and easy maintenance.

In addition to these advantages the tim®PRO pump

is particularly characterised

by its high chemical resistance, as well as good rinsing capability and thus it is ideally suited for use in the chemical industry.

Via manually activated eccentric tappet the valve balls can be lifted out of the seats.

This enables virtually complete return of the residual media quantity via the pump's suction pipe.

These variants are delivered with an intelligent IoT-enabled sensor, which allows real-time testing of the stroke signals, incl. process-relevant data (total of all strokes, average frequency, frequency histogram) via a customer PLC. With connection of our tim®IOT smartbox we enable many useful new features that increase profitability, process reliability and facilitate preventive maintenance. Simply integrate our tim®I-OT smartbox in your system and benefit from these advantages. All information in this regard is provided starting on page 84.

## **Technical data**

Transmission ratio	:	Approx. 1 to 1	The
Output (max.)	:	Approx. 600 I/min (for water)	a wi
Pump pressure (max.)	:	7 bar	(me
Drive	:	Pneumatic	will
Fluid connections	:	DIN flange PN10 / DN50, G 2"	cas
Operating pressure	:	1 to 7 bar compressed air, unoiled, filtered, or oiled	We the
Compressed air connection	:	G3/4" internal thread	tion
Suction head, dry	:	Approx. 6 meters self-priming	
Weight	:	Approx. 76 kg	
Medium temperature	:	Max. +5 °C to + 70 °C	
Ex protection	:	ATEX (see operating manual for more infor-	

mation)

## Media

The pump is suitable for pumping a wide variety of fluids (media).Resistance to the media that will be pumped must be checked on a case-by-case basis.

We would be happy to advise you on the suitability for your specific application.

## Material

Side section Middle housing section fluid seals Pneumatic seals Valve seats valve balls Diaphragm / piston seal control valve Screws Valve pipes Springs

- Stainless steel
  PE black, conductive
  FEP / EPDM
  NBR / PUR
  PTFE
  PTFE
  TFM
  Ceramic/plastic
  Stainless steel
  Stainless steel
- : None



## Fluid delivery volume



## Added values



#### Maximum paint recovery

Residual quantities of the medium can be recirculated by mechanically lifting the valve balls.



#### Easy installation

Easy replacement of the valve balls without dismounting the side cover or the unperforated diaphragms.Special tools are not required for mounting / dismounting. Only 4 sealing rings are installed on the media side.



#### **Reduced compressed air costs**

Optimised geometries with minimal dead spaces, as well as the extremely low start-up pressures <0.7 bar, reduce energy consumption to a minimum.



#### Maximisation of service life

The ceramic slide valve that is used works virtually free of wear. The durable diaphragms enable maximisation of service life.



#### Minimal maintenance costs

The durable diaphragms, the low-wear ceramic slide valve and the easy-maintenance structure of the pump guarantee extremely low service costs.



#### Increased process reliability

Safe start-up of the pump is ensured, even in critical operating situations. The bistable, over-centre valve prevents problematic intermediate positions of the control valve.